

**WHAT IS CLAIMED IS:**

1           1. A double-face velour fabric article comprises a fabric body having a technical face  
2           formed by a filament stitch yarn and a technical back formed by a filament loop yarn, said  
3           filament stitch yarn comprising heat sensitive material, said fabric body having a velour  
4           surface formed at both said technical back and said technical face, and said heat sensitive  
5           material responding to application of heat during processing to increase tortuosity with a  
6           result of said fabric body having permeability of about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less under a pressure  
7           difference of ½ inch of water across the fabric body.

1           2. The double-face velour fabric article of claim 1, wherein said heat sensitive  
2           material comprises hot melt material.

1           3. The double-face velour fabric article of claim 1, wherein said heat sensitive  
2           material comprises heat shrinkable material.

1           4. The double-face velour fabric article of claim 1, wherein said heat sensitive  
2           material is selected from the group consisting of polypropylene, polyester, and polyamide.

1           5. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2           wherein said heat sensitive material responds to application of dry heat.

1           6. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2           wherein said heat sensitive material responds to application of wet heat.

1           7. The double-faced velour fabric article of claim 6, wherein said heat sensitive  
2           material responds to application of wet heat applied by steam.

1           8. The double-faced velour fabric article of claim 6, wherein said heat sensitive  
2           material responds to application of wet heat applied by hot water.

1 9. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2 wherein said heat sensitive material responds to application of heat at about 212°F to about  
3 450°F applied for about 2 minutes to about 60 minutes.

1 10. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2 wherein said filament stitch yarn comprises elastomeric material.

1 11. The double-faced velour fabric article of claim 10, wherein said elastomeric  
2 material comprises spandex.

1 12. The double-faced velour fabric article of claim 10, wherein filaments of said heat  
2 sensitive material and filaments of said elastomeric material are commingled together.

1 13. The double-faced velour fabric article of claim 10, wherein filaments of said heat  
2 sensitive material and filaments of said elastomeric material are plaited together.

1 14. The double-faced velour fabric article of claim 10, wherein raised fibers of the  
2 velour surface of at least one of the technical face and the technical back is entangled,  
3 including in and/or through interstices of the fabric body toward the other of the technical  
4 face and the technical back.

1 15. The double-face velour fabric article of claim 14, wherein raised fibers of the  
2 technical back are entangled, including in and/or through interstices of the fabric body,  
3 toward the technical face.

1 16. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2 wherein said filament stitch yarn is a cored yarn comprising a core and a sheath, said sheath  
3 comprising hot melt material.

1 17. The double-face velour fabric article of claim 16, wherein said hot melt material  
2 is selected from the group consisting of polypropylene, polyester and polyamide.

1 18. The double-face velour fabric article of claim 16, wherein said core comprises a  
2 material selected from the group consisting of polyester and nylon.

1 19. The double-faced velour fabric article of claim 1, wherein said filament loop yarn  
2 splits to release multiple small diameter filaments.

1 20. The double-faced velour fabric article of claim 19, wherein said filament loop  
2 yarn splits by application of heat to release said multiple small diameter filaments.

1 21. The double-faced velour fabric article of claim 20, wherein said filament loop  
2 yarn comprises an "islands-in-sea" construction.

1 22. The double-faced velour fabric article of claim 19, wherein said filament loop  
2 yarn splits by application of a chemical treatment to release said multiple small diameter  
3 filaments.

1 23. The double-faced velour fabric article of claim 19, wherein said filament loop  
2 yarn splits by application of a mechanical action to release said multiple small diameter  
3 filaments.

1 24. The double-face velour fabric article of claim 1, wherein said filament loop yarn  
2 is textured.

1 25. The double-face velour fabric article of claim 1, wherein said filament stitch yarn  
2 is textured.

1 26. The double-faced velour fabric article of claim 1, claim 2, claim 3, or claim 4,  
2 wherein raised fibers of the velour surface of at least one of the technical face and the  
3 technical back is entangled, including in and/or through interstices of the fabric body toward  
4 the other of the technical face and the technical back.

1 27. The double-face velour fabric article of claim 26, wherein raised fibers of the  
2 technical back are entangled, including in and/or through interstices of the fabric body,  
3 toward the technical face.

1 28. A double-face velour fabric article comprises a fabric body having a technical  
2 face formed by a filament stitch yarn and a technical back formed by a filament loop yarn,  
3 said filament stitch yarn comprising elastomeric material, said fabric body having a velour  
4 surface formed at both said technical back and said technical face, and said fabric body  
5 having permeability of about  $80 \text{ ft}^3/\text{ft}^2/\text{min}$  or less under a pressure difference of  $\frac{1}{2}$  inch of  
6 water across the fabric body.

1 29. The double-face velour fabric article of claim 28, wherein said elastomeric  
2 material comprises spandex.

1 30. The double-face velour fabric article of claim 1 or claim 28, wherein said fabric  
2 body has permeability of about  $70 \text{ ft}^3/\text{ft}^2/\text{min}$  or less.

1 31. The double-faced velour fabric article of claim 28, wherein raised fibers of the  
2 velour surface of at least one of the technical face and the technical back is entangled,  
3 including in and/or through interstices of the fabric body toward the other of the technical  
4 face and the technical back.

1 32. The double-face velour fabric article of claim 31, wherein raised fibers of the  
2 technical back are entangled, including in and/or through interstices of the fabric body,  
3 toward the technical face.

1 33. A double-face velour fabric article comprises a fabric body having a technical  
2 face formed by a filament stitch yarn and a technical back formed by a filament loop yarn,  
3 said fabric body having a velour surface formed at both said technical face and said technical  
4 back, with raised fibers of the velour surface of at least one of the technical face and the  
5 technical back entangled, including in and/or through interstices of the fabric body toward

6 the other of the technical face and the technical back, said fabric body having permeability of  
7 about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less under a pressure difference of ½ inch of water across the fabric  
8 body.

1 34. The double-face velour fabric article of claim 33, wherein raised fibers of the  
2 technical back are entangled, including in and/or through interstices of the fabric body,  
3 toward the technical face.

1 35. A double-face velour fabric article comprises a fabric body having a technical  
2 face formed by a filament stitch yarn and a technical back formed by a filament loop yarn,  
3 said fabric body having a velour surface formed at both said technical face and said technical  
4 back, with said fabric body having permeability of about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less under a  
5 pressure difference of ½ inch of water across the fabric body, wherein, after finishing, at least  
6 one of the technical face and the technical back is subjected to hydroentanglement to  
7 entangle raised fibers of the velour surface, including in and/or through interstices of the  
8 fabric body, thereby to densify the fabric body and increase tortuosity.

1 36. The double-face velour fabric article of claim 35, wherein, after finishing, raised  
2 fibers of the technical back are entangled, including in and/or through interstices of the fabric  
3 body, toward the technical face.

1 37. The double-face velour fabric article of claim 1, claim 28, claim 33, or claim 35,  
2 wherein at least one of said filament stitch yarn and said filament loop yarn is a yarn of fine  
3 denier filaments or fibers.

1 38. A method of forming a double-face velour fabric body, said method comprising  
2 the steps of:

3 joining a filament loop yarn and a filament stitch yarn to form a fabric prebody, the  
4 filament stitch yarn forming a technical face of the fabric prebody and the filament loop yarn  
5 forming a technical back of the fabric prebody, the filament stitch yarn comprising heat  
6 sensitive material,

7 finishing said technical face and said technical back of the fabric prebody, thereby to  
8 form a double-face velour fabric body having opposite velour surfaces, and  
9 exposing said fabric body to heating sufficient to cause a response by said heat  
10 sensitive material, thereby to increase tortuosity with a result of said fabric body having  
11 permeability of about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less under a pressure difference of ½ inch of water  
12 across the fabric body.

1 39. A method of forming a double-face velour fabric body, said method comprising  
2 the steps of:

3 joining a filament loop yarn and a filament stitch yarn to form a fabric prebody, with  
4 the filament stitch yarn forming a technical face of the fabric prebody and the filament loop  
5 yarn forming a technical back of the fabric prebody,

6 finishing the technical face and the technical back of the fabric prebody, thereby to  
7 form a double-face velour fabric body having opposite velour surfaces, and

8 entangling raised fibers of at least one of the technical face and the technical back,  
9 including in and/or through interstices of the fabric body, thereby to increase density and  
10 tortuosity of the fiber body, the fabric body having permeability of about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less  
11 under a pressure difference of ½ inch of water across the fabric body.

1 40. The method of forming a double-face velour fabric body of claim 39, comprising  
2 the further step of entangling the raised fibers in a process of hydroentanglement, by  
3 directing fine, high pressure jets upon at least one of the technical face and the technical  
4 back.

1 41. The method of forming a double-face velour fabric body of claim 39 or claim 40,  
2 comprising the further step of directing fine, high pressure jets upon the technical back, to  
3 cause raised fibers of the velour surface of the technical back to entangle, including in and/or  
4 through interstices of the fabric body, toward the technical face.

1 42. The method of forming a double-face velour fabric body of claim 39, wherein the  
2 filament stitch yarn comprises heat sensitive material, and said method comprises the further

3 step of exposing said fabric body to heating sufficient to cause a response by the heat  
4 sensitive material, thereby to increase tortuosity.

1 43. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to said heating sufficient to cause a response by said  
3 heat sensitive material during dyeing.

1 44. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to said heating sufficient to cause a response by said  
3 heat sensitive material during finishing.

1 45. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to dry heat.

1 46. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to wet heat.

1 47. The method of forming a double-face velour fabric body of claim 46, comprising  
2 exposing said fabric body to steam.

1 48. The method of forming a double-face velour fabric body of claim 46, comprising  
2 exposing said fabric body to hot water.

1 49. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to said heating sufficient to cause a response by said  
3 heat sensitive material for about 2 minutes to about 60 minutes at about 212°F to about  
4 450°F.

1 50. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising joining a filament loop yarn and a filament stitch yarn, the filament stitch yarn  
3 comprising elastomeric material.

1           51. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 comprising exposing said fabric body to heating sufficient to cause a response by said heat  
3 sensitive material, thereby to increase tortuosity with a result of said fabric body having  
4 permeability of about 70 ft<sup>3</sup>/ft<sup>2</sup>/min or less.

1           52. The method of forming a double-face velour fabric body of claim 38 or claim 42,  
2 wherein the filament stitch yarn comprises elastomeric material.

1           53. A method of forming a double-face velour fabric body, said method comprising  
2 the steps of:

3           joining a filament loop yarn and a filament stitch yarn to form a fabric prebody, the  
4 filament stitch yarn forming a technical face of the fabric prebody and the filament loop yarn  
5 forming a technical back of the fabric prebody, the filament stitch yarn comprising  
6 elastomeric material, and

7           finishing said technical face and said technical back of the fabric prebody, thereby to  
8 form a double-face velour fabric body having opposite velour surfaces and permeability of  
9 about 80 ft<sup>3</sup>/ft<sup>2</sup>/min or less under a pressure difference of ½ inch of water across the fabric  
10 body.

1           54. The method of forming a double-face velour fabric body of claim 50, claim 52 or  
2 claim 53, wherein the elastomeric material comprises spandex.

09982720-101801  
TOSTOT" 02/28660